

## Basic Essentials of GC & GC-MS, Method Development & Troubleshooting GC & GC-MS Training Course

### >Package Course

This **5-day** instrument-independent package training course provides the key essential techniques and approaches to perform both GC (emphasis on chromatography) and GC-MS (emphasis on mass spectrometer detection), method development and troubleshooting, and guidance on how to avoid the pitfalls. Discount rates are available for advanced bookings as detailed in the fees table. You may also wish to take advantage of our discount rate bookings made for delegates attending courses from the same institution.

### >Who is the 5-day Basic Essentials of GC & GC-MS, Method Development & Troubleshooting GC & GC-MS Training Course for?

- >Complete beginners/early users to GC & GC-MS
- >Analysts with a few years experience in GC and/or GC-MS analysis looking for a formal course
- >Analysts looking for a refresher GC & GC-MS course
- >Analysts looking for a complete GC & GC-MS plus method development and troubleshooting course

### >Combo training packages

You may wish to consider also training on special 1-day course topics such as GC headspace, Chemical ionisation, LC-MS interpretation, LC-MS-MS interpretation, SPME and a range of other special topics. Please contact Caroline Green for further details. We offer discounted combo training packages for delegates attending 6/7/8/9 day courses spread over multiple locations throughout the year.

### >Who attends?

Academic based lab technicians, commercial lab analysts and R&D staff, post-doc, PhD and MSc students, lab managers/supervisors and service engineers from across Europe, Middle East, Asia and Africa.

### >What's different about training with us?

Because we teach the practical application of techniques, our courses are well positioned to enable analysts to use different analytical instrument models. Since most laboratories have instruments from different manufacturers, this is a key benefit in attending our courses. Just like driving a car, analysts are able to quickly navigate their own way around their specific instruments through the application of techniques.

### >Overview of course modules and topics

#### Day 1 & Day 2 :

- Separation Mechanisms
- Fundamental principles in gas chromatography
- Columns
- Injectors
- Detectors
- Quantification (external and internal standard)

**Day 3 & Day 4 :**

- Introduction to GC
- Principles of mass spectroscopy
- Ionisation techniques
- Detectors in mass spectroscopy
- Scan modes
- (MS)<sup>n</sup> and Chemical Ionisation (CI)
- PICI & NICI (positive and negative chemical ionisation)
- Problem solving strategies
- Sample introduction
- Selecting GC consumables and maintenance
- MS maintenance

**Day 5 :**

- Global view of a method
- Sample introduction conditions
- Focussing
- Column selection
- Detector selection
- Chromatographic method and temperature
- Experimental parameter optimisation
- Quality control and quantitative evaluation of a method

**>Request a full course program or book a course** for any courses or course modules from Caroline Green at [cgreen@amoebasciences.eu](mailto:cgreen@amoebasciences.eu).

**>Visit our new website:** [www.chromatographytraining.org](http://www.chromatographytraining.org)

For a list of frequently asked question, how to prepare to put forward a case for training, how best to prepare to attend a course and what you can expect to gain a course at your level.

**>Key details:**

- Classroom based course
- Budget airline destinations
- Comfortable training facilities
- Certificate of attendance provided
- Training manual provided (English)
- Discounted hotel accommodation available
- Easy accessible venue with local transportation
- Courses presented in English by industry-served and PhD qualified experts

**>Price Includes:**

Training presentation, training manual, lunches, free resources and all refreshments and snacks.

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**>Course Fees / Advanced Booking Rates**

<b>Prices are exclusive of any applicable VAT and local taxes</b>	If booked up to 20 weeks in advance	If booked up to 12 weeks in advance	If booked up to 8 weeks in advance	If booked up to 4 weeks in advance	If booked less than 4 weeks in advance
Basic Essentials of GC & GC-MS, Method Development & Troubleshooting GC & GC-MS	£1595	£1695	£1795	£1895	£1995

**>Multiple Delegate Bookings**

5% discount applicable per each additional analyst from the same institution (includes separate departments), if booked at the same time, per course.

Terms and conditions apply to all our courses (see [www.chromatographytraining.org](http://www.chromatographytraining.org))